

**Apparatus for photo-electric measurements, for use in molecular diagnostics comprises a matrix sensor system with an electronic unit to process the received electromagnetic emissions through optics from the sample for real time processing**

**Veröffentlichungsnummer** DE10214517

**Veröffentlichungsdatum:** 2003-06-18

**Erfinder** HING PAUL (DE)

**Anmelder:** SENSOVATION AG (DE)

**Klassifikation:**

- Internationale: G01J3/02; G01J3/28; G01J3/36; G01J3/00;  
G01J3/28; G01J3/30; (IPC1-7): G01J3/36;  
G01N21/62

- Europäische: G01J3/02; G01J3/28B; G01J3/36

**Anmeldenummer:** DE20021014517 20020402

**Prioritätsnummer(n):** DE20021014517 20020402; DE2001105911 84  
20011203

#### **Zusammenfassung von DE10214517**

Apparatus (1) for photo-electric measurements, comprising one or more photo-electric conversion components, and preferably matrix sensor(s) (4) e.g. charge coupled device (CCD), complementary metal-oxide semiconductor (CMOS), charge injection device (CID), and the like, is new. Apparatus (1) for photo-electric measurements, comprising one or more photo-electric conversion components, and preferably matrix sensor(s) (4) e.g. charge coupled device (CCD), complementary metal-oxide semiconductor (CMOS), charge injection device (CID), and the like, is new. An optical system (2,3) has a modular expansion on one or more axes to register electromagnetic emission from a line or surface at an object in any required size. The modular optical system divides the emission into a number of small segments for a single or multiple projection to the sensor(s). An electronic system (6) for the sensors defines the working mode and functions of the photo-electric converters, for adjustment with full programming in two dimensions in real time e.g. the pixel scanning frequency, pixel binning. The photo-electric converters can be controlled (10) independently of each other and/or are operated simultaneously and/or otherwise controlled.

**BEST AVAILABLE COPY**



my account
 learning center
 patent cart
 document cart
 log off

home

research ▾

patents ▾

alerts ▾

documents ▾

## Format Examples

## US Patent

US6024053 or 6024053

## US Design Patent

D0318249

## US Plant Patents

PP8901

## US Reissue

RE35312

## US SIR

H1523

## US Patent Applications

20020012233

## World Patents

WO04001234 or WO2004012345

## European

EP1067252

## Great Britain

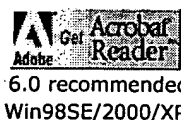
GB2018332

## German

DE29980239

## Nerac Document Number (NDN)

 certain NDN numbers can be used  
for patents

[view examples](#)


## Patent Ordering



## Enter Patent Type and Number:

☐ Add patent to cart automatically. If you uncheck this box then you must *click on* Publication number and view abstract to Add to Cart.

## Reference/Docket number



21 Patent(s) in Cart

## Patent Abstract

Add to cart

GER 2003-06-18 10214517 **VORRICHTUNG UND VERFAHREN FOOR FOTOELEKTRISCHE MESSUNG**

INVENTOR- HING PAUL DE

APPLICANT- SENSOVATION AG DE

PATENT NUMBER- 10214517/DE-A1

PATENT APPLICATION NUMBER- 10214517

DATE FILED- 2002-04-02

DOCUMENT TYPE- A1, DOCUMENT LAID OPEN (FIRST PUBLICATION)

PUBLICATION DATE- 2003-06-18

 INTERNATIONAL PATENT CLASS- G01J00336; G01N02162;  
G01J00328B; G01J00336

PATENT APPLICATION PRIORITY- 10159184, A; 10214517, A

 PRIORITY COUNTRY CODE- DE, Germany, Ged. Rep. of; DE, Germany,  
Ged. Rep. of

PRIORITY DATE- 2001-12-03; 2002-04-02

FILING LANGUAGE- German

LANGUAGE- German NDN- 203-0521-1346-1

**EXEMPLARY CLAIMS-** 1. A device consisting for photoelectric measurement, of: A) a particular or a multiplicity of photoelectric conversion elements, preferably Matrixsensor/en e.g. CCD, CMOS, CID etc., b) an optical system, which is modular in an axleor a multiplicity of axes expandable, in order to seize electromagnetic emission of a line or a surface in each desired size at an object, with each desired dissolution, whereby the optical system mentioned preferably separates the mentioned electromagnetic radiation modular into a multiplicity from smaller segments and the electromagnetic according to emission the smaller segments mentioned on the particular or a multiplicity of individual photoelectric conversion elements projects, and C) of sensor electronics, which stands in connection with dem/den photoelectric conversion elements mentioned, it permits to define and change in real time the operating mode and the functionality of the photoelectric conversion elements mentioned, whereby functions, e.g. the selection

sequence of pixels and the unlimited flexibility of the pixel summation ("pixel binning") in two dimensions and the photoelectric conversion elements mentioned are fully programmable independently and/or at the same time can be operated and/or headed for. 2. The device according to requirement 1, by the fact characterized that the segments mentioned of electromagnetic emission originate from a multiplicity of overlapping regions on that line or that which can be measured range which can be measured. 3. The device according to requirement 1, by the fact characterized that the segments mentioned of electromagnetic radiation from one or a multiplicity of regions on that originate linear surface which can be measured, whereby the regions are neighbouring or can be between the regions mentioned a distance be given, which corresponds to the regions, which are not interesting for the measurement, whereby the device offers its functionality preferably only for the ranges which can

NO-DESCRIPTORS

 **proceed to checkout**

Nerac, Inc. One Technology Drive . Tolland, CT

Phone (860) 872-7000 Fax (860) 875-1749

©1995-2003 All Rights Reserved . [Privacy Statement](#) . [Report a Problem](#)